

Figure 1

Sleeping Processes Waiting for Lock
175

Read Requestor A 180	Read Requestor B 182	Read Requestor C 184	Read Requestor D 186
Priority 181	Priority 183	Priority 185	Priority 187
Write Requestor E 188	Read Requestor F 190	Read Requestor G 192	Write Requestor H 194
Priority 189	Priority 191	Priority 193	Priority 195

Each Woken Process Requests Lock 220

Lock Available? 155

Yes 158 → Access Lock 160 → Shared Resource 120

No 162 → Add Process to Queue 165

Process Go to Sleep 170

FIFO Queue
130

Process A	Read
Process B	Read
Process C	Read
Process D	Read
Process E	Write
Process F	Read
Process G	Read
Process H	Write

Write →

Wake Process Up for Possible Lock Access 200

Lock Control Structure
100

Want Write Flag 105	Read Mode Flag 110
Proc. ID / Num. Readers 115	

AUS9-2000-0604-US1 (2/8)

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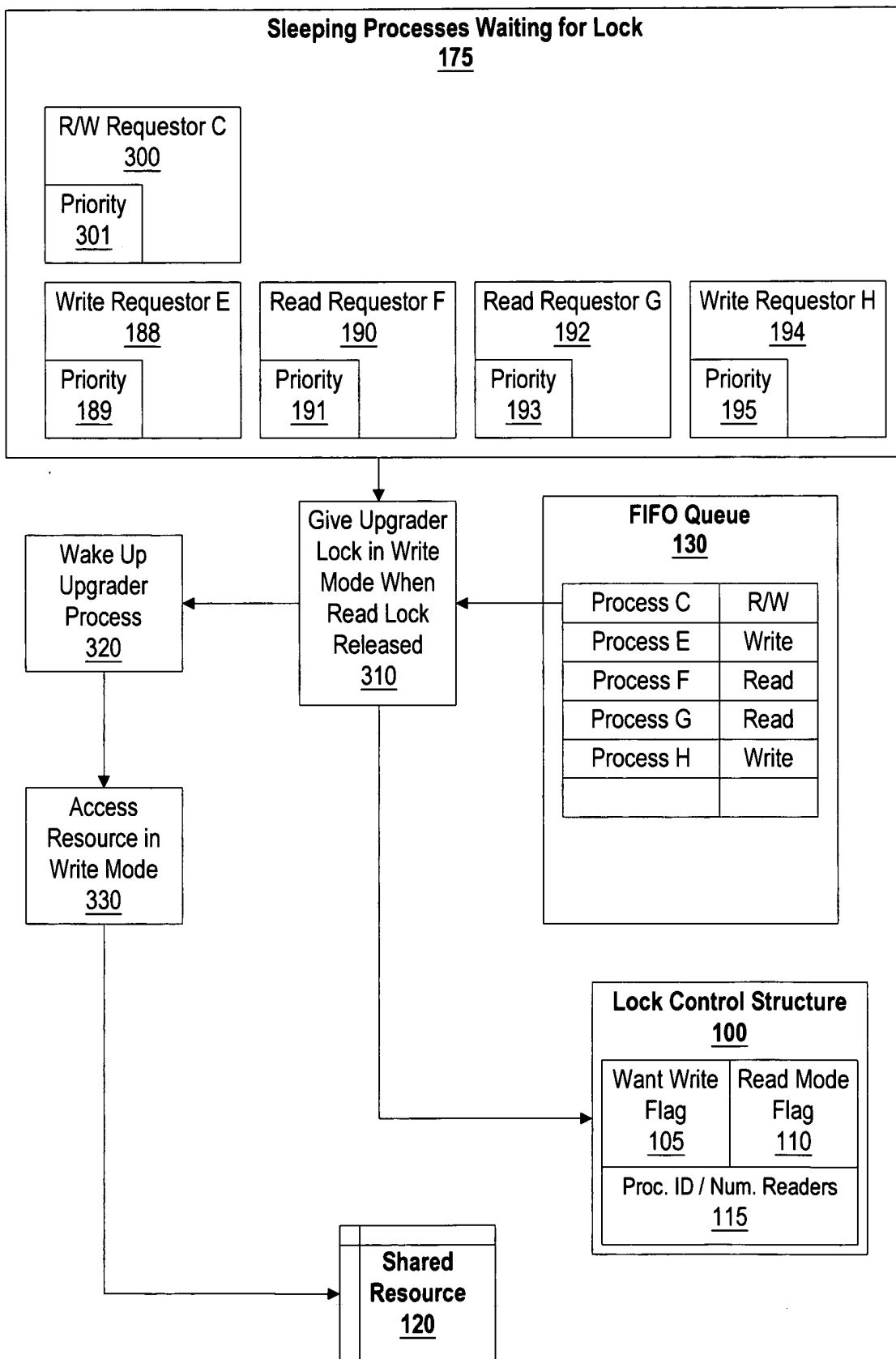


Figure 3

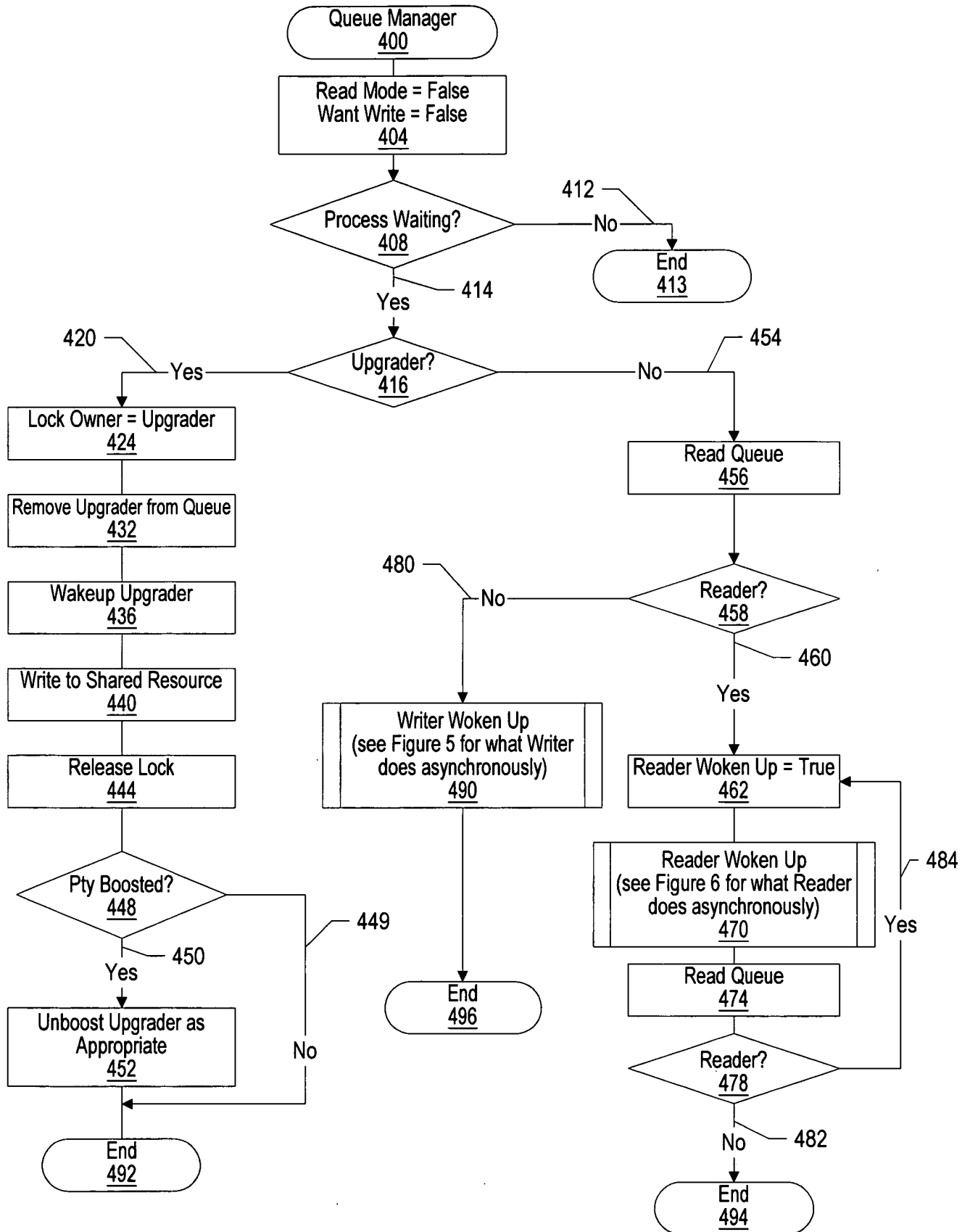
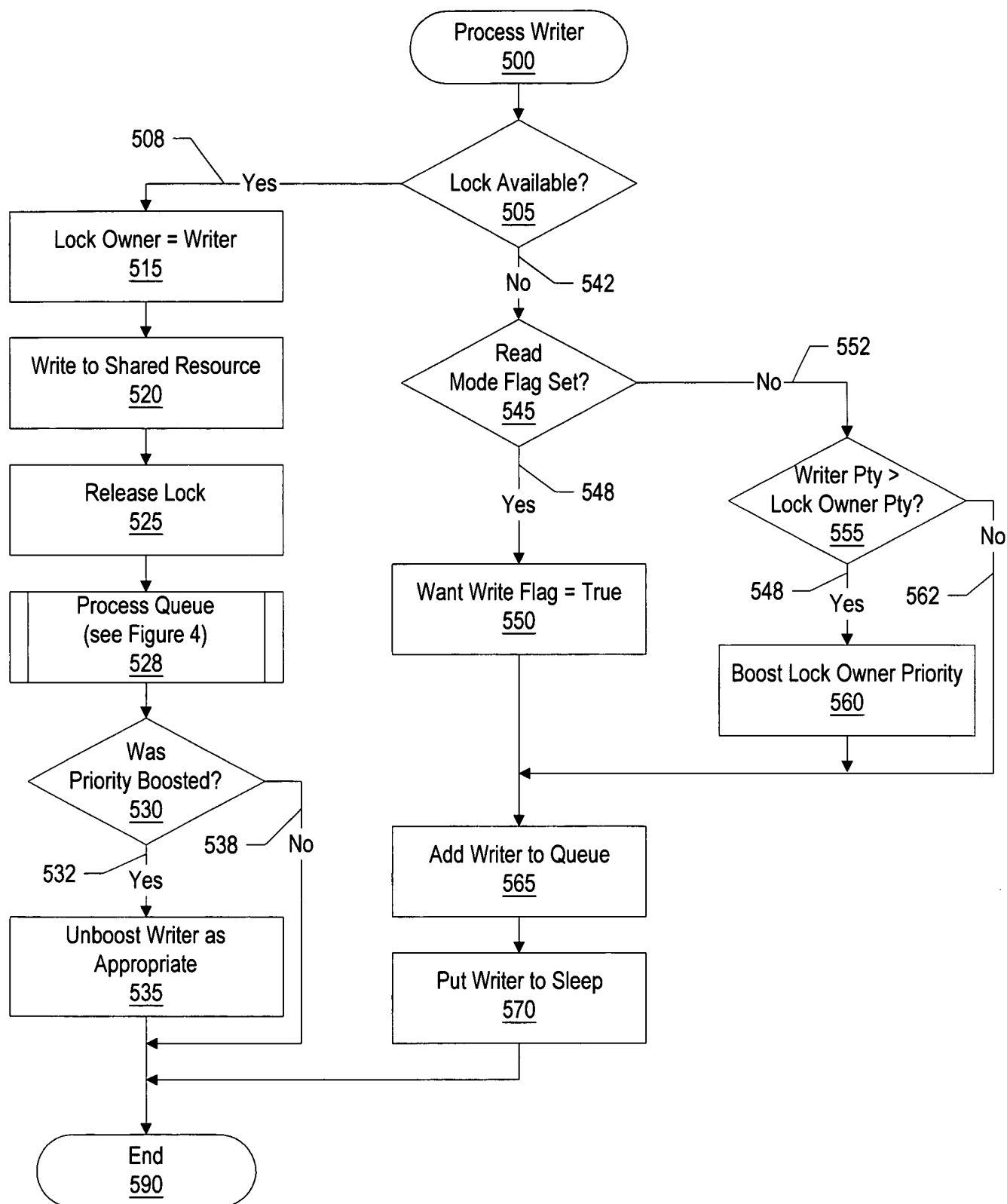


Figure 4



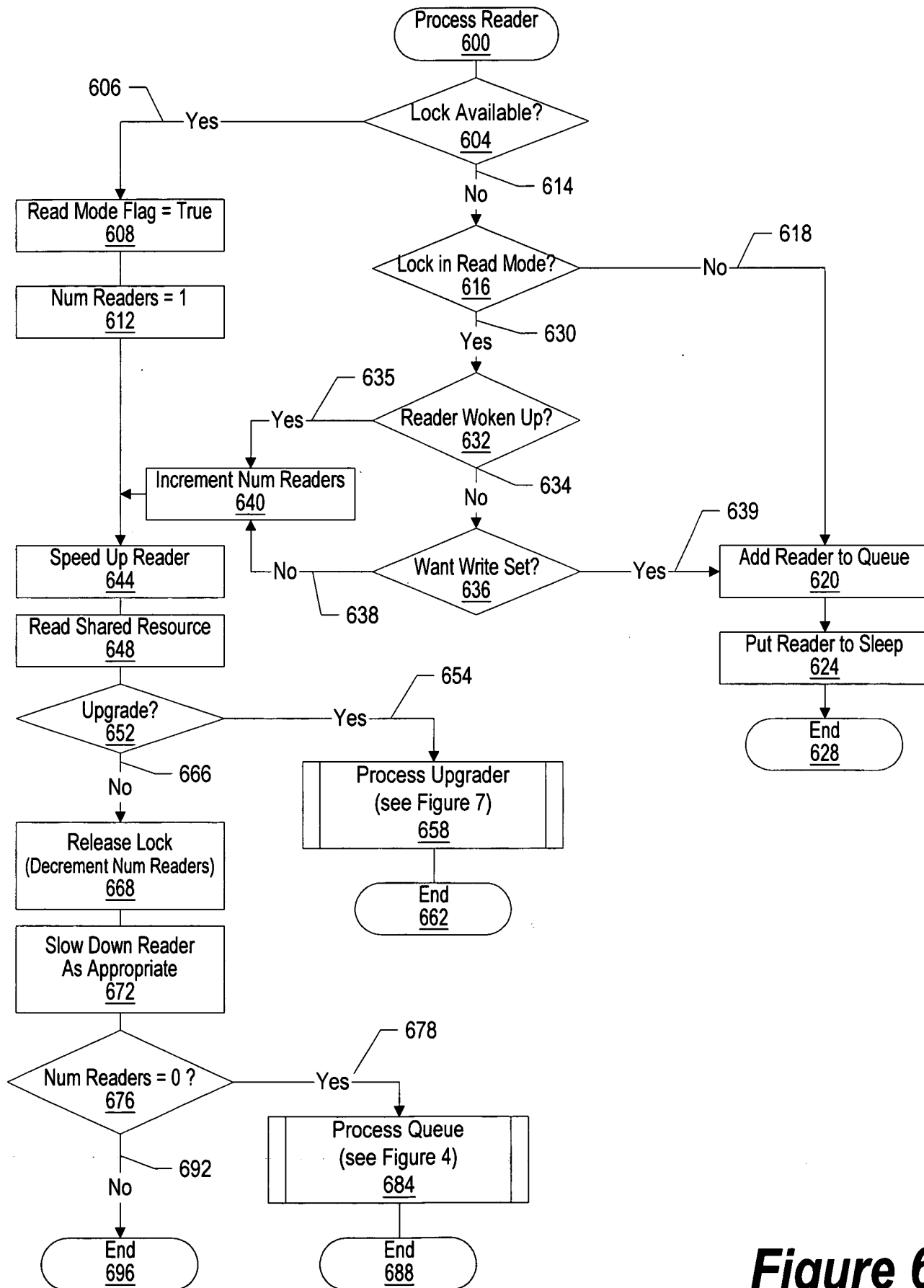


Figure 6

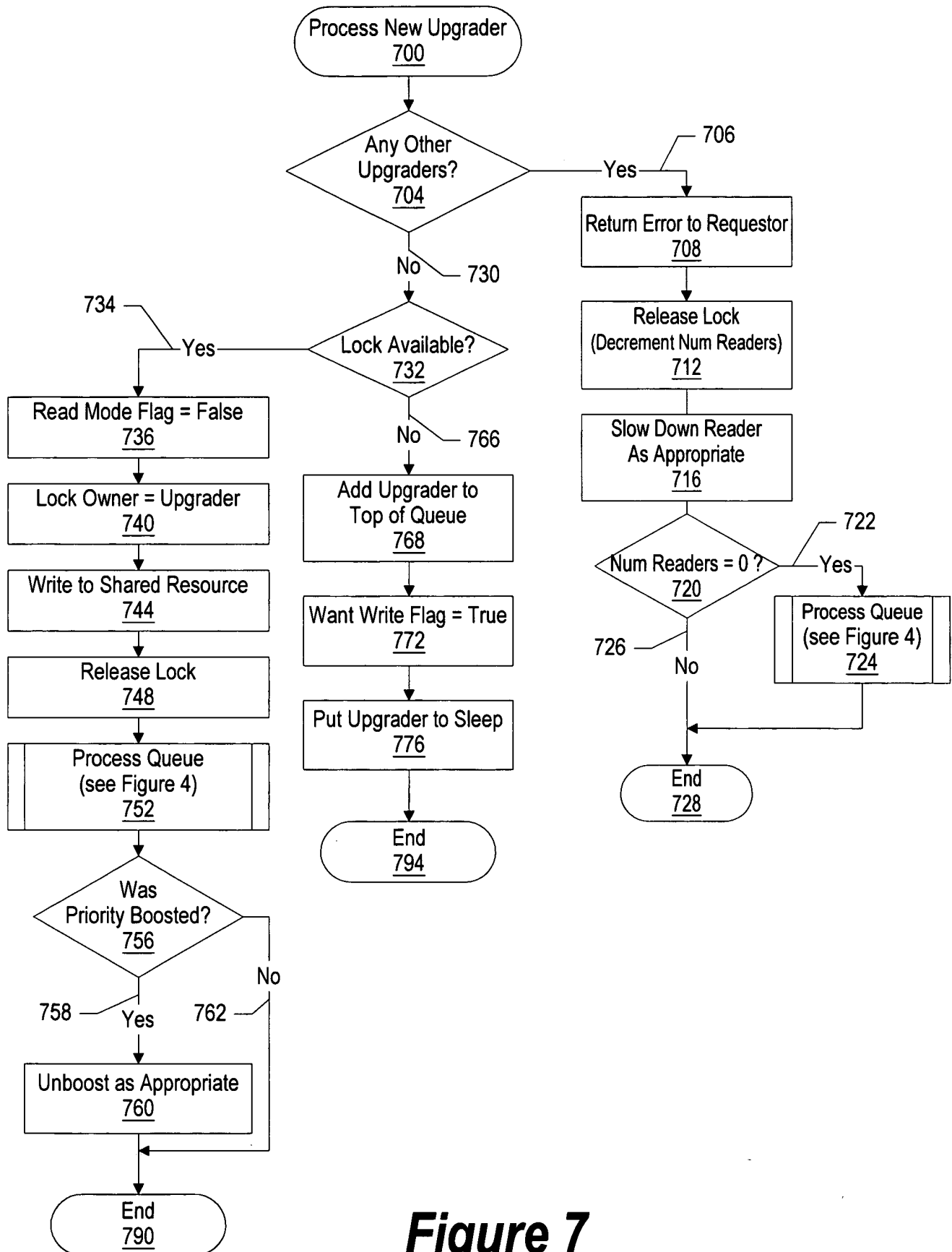


Figure 7

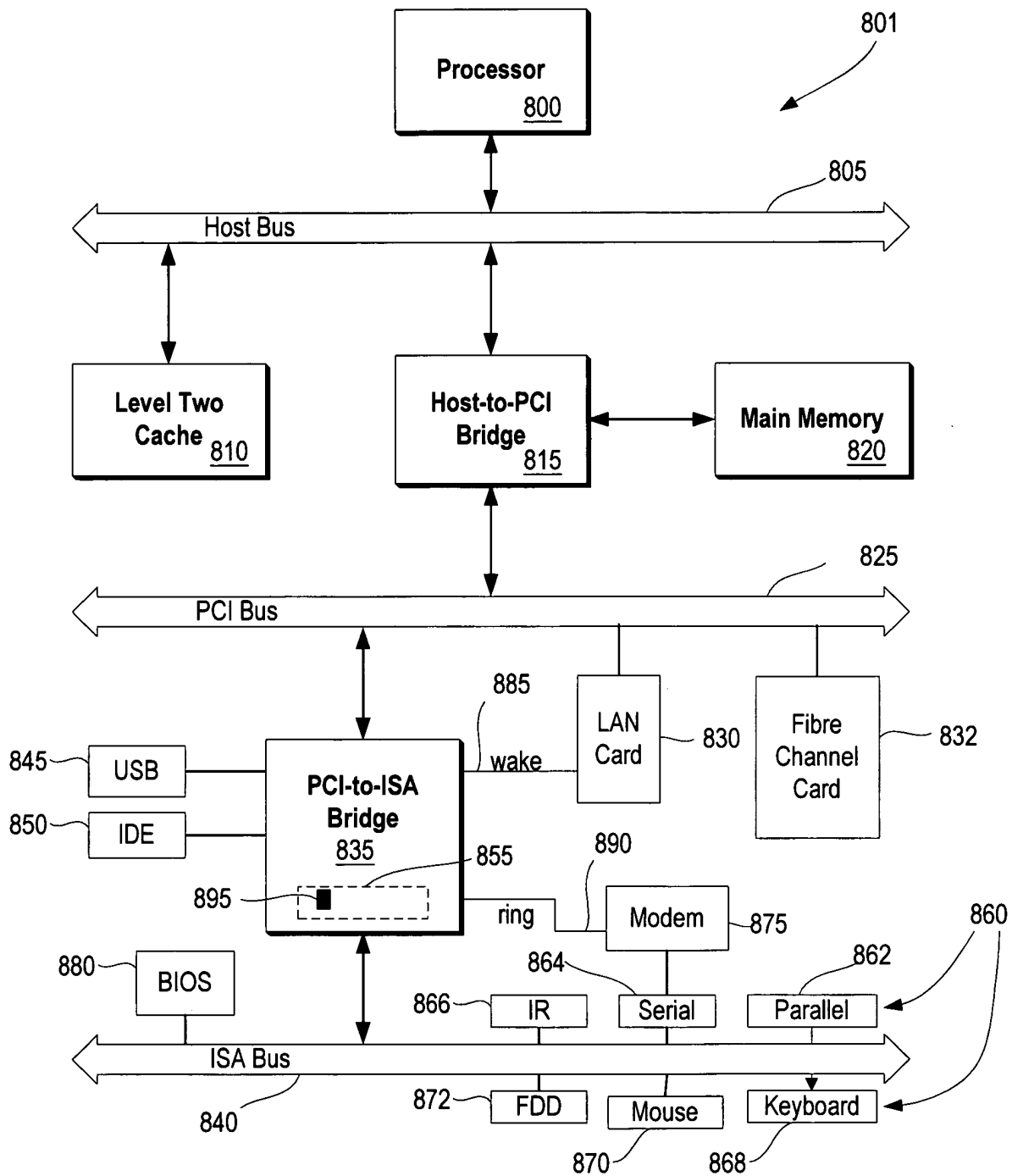


Figure 8